

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR Hajime Ohata 2005_0875A 6675 10/537,914 06/08/2005 **EXAMINER** 01/25/2006 WENDEROTH, LIND & PONACK, L.L.P. FLANIGAN, ALLEN J 2033 K STREET N. W. PAPER NUMBER ART UNIT **SUITE 800** WASHINGTON, DC 20006-1021 3753

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/537,914	OHATA ET AL.
	Examiner	Art Unit
	Allen J. Flanigan	3753
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 2a) This action is FINAL . 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) ☐ Claim(s) 5-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 5-11 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	

Application/Control Number: 10/537,914 Page 2

Art Unit: 3753

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5, 6, 8, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagasaka.

Please see the Figs. 15 and 18 embodiments, showing ports 10a, 10b, 12a, 12b formed through partitions in an extruded header.

Regarding claim 6, this recitation concerns the intended method of making the heat exchanger. Such recitations fail to distinguish the structure being claimed absent a showing that a punched hole, for example, will result in structure distinct from one formed by drilling, laser cutting, EDM, etc¹.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasaka in view of Kuroyanagi et al.

¹ In re Dike, 157 U.S.P.Q. 581; see also MPEP chapter 2113 on product-by-process claims.

Nagasaka does not discuss specific recommended gauges/thicknesses for the extruded header tube. It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to select a thickness that provided an appropriate compromise between the need to meet the pressure handling/burst strength requirements of a given application and the desire to minimize weight and cost (and facilitate machining the tube receiving holes, etc.). Striking such balances in heat exchanger components such as tubes and headers is routine for the designer in the art; Kuroyanagi et al. specifically discuss forming a multi-chambered header from sheet metal plate having a thickness of "0.6 mm so that the tank portions . . . have sufficient strength" (column 7 lines 38-40). Thus, selecting a value for the wall thickness of Nagasaka's extruded header tube somewhere within the range claimed would have been obvious to one of ordinary skill in the art.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining references of record show mutlichambered headers for heat exchangers that are extruded and/or contain ports formed in the partitions defining the chambers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allen J. Flanigan Primary Examiner Art Unit 3753

AJF